SOME THOUGHTS ABOUT THE IMPACT OF EXISTING POLICIES AND REGULATIONS ON RISK-BASED CLEANUP

In thinking about implementing risk-based cleanup as a way of reducing the time and cost of tank cleanups, it is useful to consider some provisions of existing State Board policies and regulations, which I believe can be easily read in ways that are not friendly to risk-based cleanup. I present this only by way of focusing the Task Force on some of the issues that need to be addressed if risk-based cleanup is to be widely implemented.

Although some of the most significant issues are in the regulations themselves (which are technically controlling over any tank cleanup), it is useful to review State board Resolution 92-49, as a roadmap of the issues, and a reflection of "official" policy. As it pertains to tank cleanups, 92-49 provides:

III. . . . The Regional Water Board shall:

- G. Ensure that dischargers are required to clean up and abate the effects of discharges in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible; in approving any alternative cleanup levels less stringent than background, apply Section 2550.4 of Chapter 15, or, for cleanup and abatement associated with underground storage tanks, apply Section 2725 of Chapter 16, provided that the Regional Water Board considers the conditions set forth in Section 2550.4 of Chapter 15 in setting alternative cleanup levels pursuant to Section 2725 of Chapter 16; any such alternative cleanup level shall:
- 1. Be consistent with maximum benefit to the people of the state;
- 2. Not unreasonably affect present and anticipated beneficial use of such water; and
- 3. Not result in water quality less than that prescribed in the Water Quality Control Plans and Policies adopted by the State and Regional Water Boards . . .

At first blush, this language seems to provide some significant flexibility (although criteria 3 above is problematic), until one considers the effect of the regulations cited.

Starting with the regulations specifically applicable to USTs, 23 Cal Code Reg. 2725, cited in Resolution 92-49, provides, in relevant part:

(g) Cleanup levels for ground or surface waters, affected or threatened by the unauthorized release, shall comply with the requirements of Section 2721(b) . . .

That last section, 23 Cal Code Reg. 2721 (b) provides:

- (b) Responsible parties shall take corrective action in compliance with the following requirements:
 - (1) all applicable waste discharge requirements or other order issued pursuant to Division 7, commencing with Section 13000 of the Porter-Cologne Water Quality Control Act (Water Code);
 - (2) all applicable state policies for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7 of the Water Code:
 - (3) all applicable water quality control plans adopted pursuant to Article 3 (commencing with Section 13240) of Chapter 4 of Division 7 of the Water Code;
 - (4) all applicable requirements of Chapter 6.7 (commencing with Section 25280) and the regulations (Chapter 16, Title 23 CCR) promulgated thereto; and
 - (5) all applicable requirements of Article 4 of Chapter 6.75 of the Health and Safety Code, the applicable provisions of this Chapter, and the Federal act.

Note that the introductory language says that corrective action SHALL be taken consistent with all of these requirements, which would include Resolution 92-49, and Section 2550.4 of Chapter 15 (23 Cal Code Reg. 2550.4), which is cited in 92-49. That regulation provides that concentration levels for corrective action can be set at levels above background "only if the regional board finds that it is technologically or economically infeasible to achieve the background value for that constituent and that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the concentration limit greater than background is not exceeded . . . " (subsection (c)). While it might be possible to fit risk-based cleanups into that standard, there are two problems. First, the wording of the regulation places the default at background (meaning non-detect for gasoline constituents), meaning the that responsible party bears the burden of showing that background levels are "technically and economically infeasible" and that risk-based cleanup is an acceptable alternative.

An even bigger problem is the following provision from subsection (e) of 23 Cal Code Reg. 2550.4:

(e) . . . No provision of this section shall be taken to allow a concentration limit greater than background, for a constituent of concern, to exceed the maximum concentration that would be allowed under other applicable statutes or regulations (e.g., Maximum Concentration Limits established under the federal Safe Drinking Water Act . . .

In other words, this regulation does not allow the concentration for corrective action to be set above MCLs – which, for benzene, is barely above non-detect. Frankly, I know that there have been plenty of closures around the State that do to meet this standard, at least not at the time of closure.

I know that many closures have been based on that notion that these standards will be achieved through natural attenuation of traditional gasoline constituents over time (although I personally don't have knowledge of if/how this works for oxygenates). I look forward to discussing with the technical folks how risk-based cleanups could work in the context of this policy/regulatory scheme (e.g., is it enough from a technical point of view to say that MCLs will be achieved in a few hundred years?) and what changes might be desirable and/or feasible to make risk-based cleanups the norm, rather than the exception.

I would also note in closing that 92-49 provides for case closure based on "containment zones," but the requirements for establishing and getting closure based on a containment zone are very onerous, so I doubt that is a productive avenue for pursuing risk-based cleanups.

Peter Niemiec 07/27/09